UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

	5. LEASE LC - 029410 (B)
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
nt	7. UNIT AGREEMENT NAME MCA UNIT
_	8. FARM OR LEASE NAME MCA UNIT But
_	9. WELL NO. 106
_	10. FIELD OR WILDCAT NAME MALJAMAR G/SA
 7	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
	SEC. 30, T-175, R-32E 12. COUNTY OR PARISH 13. STATE
 E,	14. API NO.
	15. ELEVATIONS (SHOW DF, KDB, AND WD)
	(NOTE: Report results of multiple completion or zone change on Form 9–330.)

GEOLOGICAL SONALI	
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)	7. UNIT AGREEMENT NAME MCA UNIT 8. FARM OR LEASE NAME
1. oil gas well other WATER NJECTION	9. WELL NO.
2. NAME OF OPERATOR CONOCO INC.	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR P. O. Box 460, Hobbs, N.M. 88240	MALJAMAR G/SA 11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	AREA SEC. 30, T-175, R-32E
below.) AT SURFACE: 50 FNL 4 2635 FWL AT TOP PROD. INTERVAL: AT TOTAL DEPTH:	12. COUNTY OR PARISH 13. STATE
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	14. API NO.
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF: TEST WATER SHUT-OFF	it to this work.)*
ILEASE SEE ATTACHED PROCES	NOV10 193
	South DIST. 6 N. M.
	WELL NEW WEL
	•
Subsurface Safety Valve: Manu. and Type	Set @ Ft.
18. I hereby certify that the foregoing is true and correct	visor 11/9/83
SIGNED TITLE Administrative Super	wenr III I I I I I
	DATE
(ORIG. SGD.) DAVID RThic page or Federal or State of	DATE



MCA UNIT NO. 106 REPAIR BAD CASING

LOCATION: 50' FNL & 2365' FWL, Section 30, T17S-R32E, Lea County, NM

ELEVATION: 3920' TD: 3975' P.B.T.D.: 3972' MEASURING DATUM: "O" AGL

TOP OF SALT: 820' BASE OF SALT: 1805' SCALE BUILDUP: NR

TOP OF 6TH ZONE: 3832' JUNK IN HOLE: NR EST. T.O.C.: 2307'

COMPLETION: OH - Shot 3614 - 3685 w/140 qts

CASING: Surface: 10-1/4", 40# csg @ 69' w/50 sxs Production: 7", 20# csg @ 3557' w/250 sxs

RECOMMENDED PROCEDURE:

1. Backflow well until well can be pulled safely.

2. Rig up pulling unit.

A. Nipple up B.O.P.

B. POOH with 1200' of injection tubing.

3. Prepare csg shoe for cement squeeze.

A. GIH w/6-1/4" bit, 7" csg scraper and 2-7/8" workstring. Scrape csg from surface to 3550'.

NOTE: Do not go below 3557' with csg scraper, you might not get back out. Straptbg in the hole.

- B. POOH w/2-7/8" workstring, 7" csg scraper and 6-1/4" bit.
- C. GIH w/2-7/8" workstring open ended. Tag for fill. Fill OH section with crushed oyster shells to 3572'. Approximate OH volume if no fill exists 72 sxs.

NOTE: Circulate through the when running open ended and tagging to prevent plugging of the.

- D. Tag top of osyter shells to determine that oyster shells are at 3572. With dump bailer, spot 50 lbs Cal-Seal on top of oyster shells.
- E. GIH w/7" 20 lb squeeze packer and 2-7/8" workstring. Set packer @ 3470'. Load backside w/TFW w/l gal Adomall/1000 gals water. Pressure up backside to 500 psi.

NOTE: Strap tbg in hole.

NOTE: Pressure test the into hole above slips to 4000 psi.

- 4. Cement squeeze the 7" 20 lb csg shoe as follows:
 - A. Establish a pump rate of 2 BPM @ 2500 psi with 25 bbls fresh water (tbg volume is 20.5 bbls).
 - B. Pump 50 sxs of thixotropic cement @ a maximum surface pressure of 2500 psi (see cement detail attached).
 - C. Flush the volume w/23 bbls fresh water.
 - D. W.Ö.C. 24 hrs.
 - E. POOH w/2-7/8" workstring and squeeze packer.

NOTE: If you catch pressure and cannot complete the squeeze, release the squeeze packer and reverse out cement w/fresh water. Set squeeze packer and pressure up on the interval to 2000 psi surface pressure. Casing OH volume below packer is approximately 4 bbls.

Estimated pump time @ 1 BPM: 42 minutes total job.

NOTE: Have thixotropic mixture tested for pump time using Maljamar fresh water before doing job.

		Cement Det	ail (Base (Cement Class A)	•
		Thixotropic Cement			
Water gal/sx	Cal-Seal lb/sx	Bentonite %	CaCl ₂	Slurry Weight lb/gal	Slurry Volume Ft ³ /sx
5.2	10	0	1	15.9	1.24

- 5. Prepare OH to run csg.
 - A. GIH w/6-1/4" fishtail bit, DC's and 2-7/8" workstring.
 - B. Drill out cement and oyster shells to 3604'. POOH.
 - C. GIH w/dump bailer, tag top of oyster shells @ 36041, and spot 50 lbs of Cal-Seal on top of oyster shells. POOH.
- 6. Run and cement to surface, 3600 ft of 5" 13.00 lb ST&C K-55 csg.
 - A. Make up guide shoe on bottom of 5" 13.00 lb ST&C K-55 csg. Rum one jt of 5" 13.0# K-55 csg and make up float collar (thread lock compound should be used on guide shoe and threads between float collar). Run a centralizer every 500' starting at the float collar connection.
 - B. Tag top of oyster shells and raise csg approximately 21.

NOTE: 5" 13.00 lb ST&C recommended make up torque.

Minimum	Optimum	Maximum
ft/lb	ft/lb	ft/lb
1400	1860	2330

7. Cement the 5" 13 lb K-55 to surface @ 2.5 BPM and a maximum surface pressure of 2500 psi as follows:

NOTE: 2.5 BPM is 155 ft/min annular velocity.

NOTE: Reciprocate production csg while cementing.

NOTE: Weight of csg in air 46,800 lbs.

NOTE: Estimated maximum pickup weight while cementing to reciprocate pipe 75,252 lbs.

- A. Lead in with 20 bbls fresh water spacer.
- B. With plug container, drop bottom plug.
- C. Pump 277 sxs of Class "C" cement with 2% CaCl ..
- D. Drop top plug and displace it with fresh water. Approximated displacement volumes 70 bbls.
- E. SI and W.O.C. 24 hrs.

NOTE: 277 sxs is 10% excess of csg--csg annular volume and csg--OH annular volume.



MCA UNIT NO. 106
Repair Bad Casing
Page 3

Water Requirements
Gal/sk
6.3

Cement Detail
Class C Cement
Slurry Weight
Lbs/gal
14.8

Slurry Volume Ft³/sx 1.32

- 8. C.O. to T.D. of 3972'.
 - A. GIH w/4-1/4" fishtail bit, D.C.'s and 2-3/8" workstring.
 - B. Drill out cement to 3595' and test csg to 1000 psi for 15 minutes.
 - C. Drill out cement and oyster shells to 3972'.
 - D. POOH w/workstring, D.C.'s and 4-1/4" bit.
- 9. Acidize the Grayburg San Andres section @ 2 BPM and 2500 psi maximum surface pressure as follows:
 - A. GIH with 5" 13 lb treating packer and workstring set treating packer @ 3550'. Load backside and pressure up to 500 psi. Test tbg above slips to 4000 psi.
 - B. Pump 840 gallons (20 bbls) 15% HCl-NE-FE (inhibit acid for 24 hrs @ 90°F).
 - C. Pump 350 lbs of graded rock salt mixed in 5.5 bbls 10 PPG brine water with 10 lbs guar gum (2 hour breaker).
 - D. Pump 840 gallons 15% NE-FE-HCl (inhibited for 24 hrs at 90°F).
 - E. Flush with 15 bbls TFW w/2% KCL and 1 gallon Adomal1/1000 gallons water.
 - F. SION.
 - G. POOH w/workstring and treating packer.
- 10. Return MCA Unit No. 106 to injection @ a surface injection pressure of 2000 psi and estimated rate of 340 BWPD.
 - A. GIH w/5" 13 lb injection packer and 2-3/8" plastic coated tbg.
 - B. Circulate approximately 60 bbls packer fluid and set injection packer @ 3500' w/12 pts tension.
 - C. Return MCA Unit 106 to injection and monitor well for communications. Report rates and injection pressures each month.